## (19) World Intellectual Property Organization International Bureau

(43) International Publication Date 13 January 2005 (13.01.2005)

mauonai bureau



## A TERRI BUNGAN KERANTAN NUN BENJABINA DAN KERANTAN KANTAN BUNA BUNA BUNA DAN BURUAN DAN KERANTA DAN KERANTAN B

PCT

## (10) International Publication Number WO 2005/002336 A1

(51) International Patent Classification7:

A01N 37/44

(21) International Application Number:

PCT/KR2004/001635

(22) International Filing Date:

2 July 2004 (02.07.2004)

(25) Filing Language:

Korean

(26) Publication Language:

English

(30) Priority Data: 10-2003-0044486

2 July 2003 (02.07.2003) KI

(71) Applicant (for all designated States except US): KOREA RESEARCH INSTITUTE OF CHEMICAL TECH-NOLOGY [KR/KR]; #100, Jang-dong, Yuseong-gu, Daejeon 305-343 (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): CHO, Kwang-Yun [KR/KR]; #383-21, Doryong-dong, Yuseong-gu, Daejeon 305-340 (KR). YU, Ju-Hyun [KR/KR]; Cheonggu Apt. 106-504, #462-4, Jeonmin-dong, Yuseong-gu, Daejeon 305-390 (KR). CHOI, Gyung-Ja [KR/KR]; Cheonggu Apt. 104-1005, #462-4, Jeonmin-dong, Yuseong-gu, Daejeon 305-390 (KR). LIM, He-Kyoung [KR/KR]; Hanbit Apt. 130-202, #99, Oeun-dong, Yuseong-gu, Daejeon 305-333 (KR). JANG, Kyoung-Soo [KR/KR]; Hanbit Apt. 127-1206, Oeun-dong, Yuseong-gu, Daejeon 305-755 (KR). KIM, Bum Tae [KR/KR]; Expo Apt. 102-505, #464-1, Jeonmin-dong, Yuseong-gu, Daejeon 305-761 (KR). YU, Yong Man [KR/KR]; Wooju Apt. 501-1404,

Yongkang-dong, Kyungju-si, Kyungsangbuk-do 780-949 (KR). SHIN, Ho Cheol [KR/KR]; Cheongwoo 3-cha Apt. 302-105, #276-6, Hwangseong-dong, Kyungju-si, Kyungsangbuk-do 780-130 (KR).

- (74) Agents: JANG, Seongku et al.; 19th Fl., KEC Building, #275-7, Yangjae-dong, Seocho-ku, Seoul 137-130 (KR).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ADJUVANT FORMULATION FOR ENHANCING THE FUNGICIDAL EFFICACY AND FUNGICIDAL COMPOSITION CONTAINING SAME

(57) Abstract: Disclosed in this invention is an adjuvant formulation for enhancing the fungicidal efficacy of KNF-1001 or KNF-1002 against plant diseases comprising an adjuvant selected from the group consisting of a polyoxyethylene-based nonionic surfactants which has an aliphatic alcohol, a fatty acid or triacyl glyceride as a lipophilic moiety containing at least 8 carbon atoms and a polyoxyethylene as a hydrophilic moiety having 3 to 25 oxyethylene repeating units, a polyoxyethylene and 25 to 45 oxypropylene repeating units and a mixture thereof, an anionic surfactant selected from the group consisting of sodium dioctyl sulfosuccinate, sodium dodecylbenzenesulfonate and a mixture thereof, and fatty acid alkyl esters having at least 14 carbon atoms. Also disclosed in this invention is a fungicidal composition for enhancing the fungicidal efficacy of KNF-1001 or KNF-1002 against plant diseases, which comprises a selected active compound together with said adjuvant.

